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10
11 UNITED STATES DISTRICT COURT
12 NORTHERN DISTRICT OF CALIFORNIA

13 E.DIGITAL CORPORATION,
14
15 Plaintiff,
16 v.
17 DROPCAM, INC.,
18 Defendant.

Case No. 3:14-cv-04922-JST

**DEFENDANT DROPCAM, INC.'S
RESPONSIVE CLAIM CONSTRUCTION
BRIEF**

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TABLE OF CONTENTS

	Page
I. INTRODUCTION.....	1
II. THE ASSERTED PATENTS	1
III. LEGAL PRINCIPLES	4
IV. CONSTRUCTION OF DISPUTED CLAIM TERMS	5
A. “social signature”	5
B. “social hierarchy”	9
C. “social template”	12
D. “unique social signature”	14
E. “sensor value range”	15
F. “optical sensor”	17
G. “information”	19
H. “provide/ provides/ providing differing levels of information”	21
I. “provided.../ provides/ providing an update”	23
J. “accurate”	24

1 **TABLE OF AUTHORITIES**

2 **Page(s)**

3 **CASES**

4 *Alloc, Inc. v. Int’l Trade Comm’n*, 342 F.3d 1361 (Fed. Cir. 2003)8

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6 Cir. 2001)19, 23, 24

7 *Honeywell Int’l, Inc., et al. v. ITT Indus., Inc.*, 452 F.3d 1312 (Fed. Cir. 2006)4, 16, 21, 24

8 *Hutchins v. Zoll Medical Corp.*, 492 F.3d 1377 (Fed. Cir. 2007)7

9 *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996).....4

10 *Netword, LLC v. Central Corp.*, 242 F.3d 1347 (Fed. Cir. 2001).....4, 8, 15, 18

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2008).....15, 17

12 *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314 (Fed. Cir. 2003).....4

13 *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005).....4

14 *Seachange Int’l Inc. v. C-COR Inc.*, 413 F.3d 1361 (Fed. Cir. 2005)13

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17 *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576 (Fed. Cir. 1996)4, 19, 22

18 *Wang Labs., Inc. v. Am. Online, Inc.*, 197 F.3d 1377 (Fed. Cir. 1999).....12, 15, 17

19 **STATUTES**

20 35 U.S.C. § 1127

TABLE OF ABBREVIATIONS¹

Plaintiff e.Digital Corporation	e.Digital
Defendant Dropcam, Inc.	Dropcam
Nest Labs, Inc.	Nest
U.S. Patent No. 8,306,514	'514 patent
U.S. Patent No. 8,311,522	'522 patent
U.S. Patent No. 8,311,523	'523 patent
U.S. Patent No. 8,311,524	'524 patent
U.S. Patent No. 8,315,618	'618 patent
U.S. Patent No. 8,315,619	'619 patent
U.S. Patent Nos. 8,306,514; 8,311,522; 8,311,523; 8,311,524; 8,315,618; and 8,315,619, collectively ²	asserted patents
Plaintiff e.Digital's Opening Claim Construction Brief (Dkt. No. 50)	Opening Brief or Op. Br.
claim	cl.

¹ All exhibit citations refer to the accompanying declaration of Madeleine E. Greene.

² All supporting patent specification, patent claim, and prosecution history citations identified herein reference the '618 patent, unless otherwise noted. Dropcam additionally relies upon the corresponding and identical disclosures contained in the specifications and prosecution histories of each of the asserted patents.

1 **I. INTRODUCTION**

2 At a high level, the asserted patents purport to cover a communication device that detects
3 sensor data including an amount of light from an optical sensor and a sound level from an acoustic
4 sensor. The collected data is then compared with stored sensor value ranges. This is called a
5 “social signature.” The “social signature” identifies a user activity and is used to select a “social
6 template.” According to the selected “social template,” differing levels of information about the
7 identified user activity are then automatically provided to each member of the predetermined
8 “social hierarchy.” The example throughout the patents relates to detection of a low amount of
9 light and no sound which leads to the conclusion that a user is sleeping. Different information
10 would then be provided to different people based upon their relationship to the user and the user’s
11 preferences. Family may be informed that the user is sleeping while the user’s coworkers may be
12 informed that she is simply unavailable.

13 In a results-based attempt to ensnare Dropcam’s accused web cameras, e.Digital proposes
14 constructions so broad that they are meaningless. e.Digital fails to support its constructions with
15 the intrinsic record, relying instead upon what is “conceivable” and what “one can envision” the
16 patents may cover. e.Digital’s attempt to exclude the public from practicing an invention
17 “envision[ed]” by the inventor should be rejected, as e.Digital may only exclude that which is
18 disclosed. While e.Digital repeatedly mischaracterizes the scope of Dropcam’s proposed
19 constructions as narrower than they are, an accurate reading shows that Dropcam advocates
20 constructions of the disputed claim terms that are consistent with the claim language and
21 supported by the intrinsic record. Further, Dropcam’s constructions provide necessary guidance to
22 the finder of fact. e.Digital’s efforts to broaden the scope of the asserted patents should be
23 rejected, and the constructions advocated by Dropcam should be adopted by the Court.

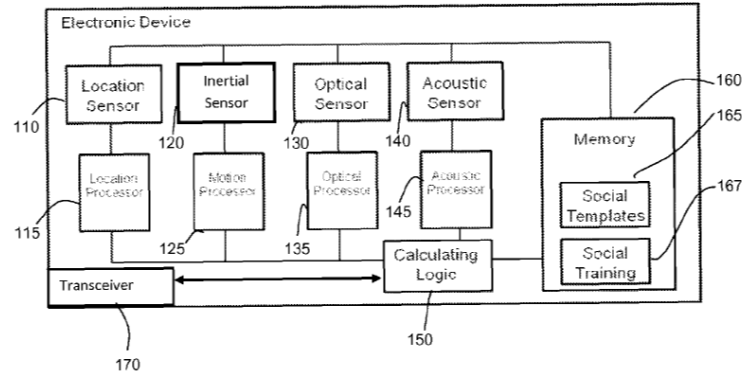
24 **II. THE ASSERTED PATENTS**

25 All six asserted patents stem from the same application and share a specification. Each
26 patent contains similar claims designed to: (1) “monitor social activity using multiple sensors”
27 (’618 patent. at 9:16-17); (2) “classify a current user’s activity from a plurality of predefined [or
28 trained] identifiable activities,” (*id.* at 14:55-58); and (3) “automatically provide differing levels of

information according to a predetermined social hierarchy” (*id.* at Abstract). *See id.* at 14:63-15:31. The primary example provided in the specification is that a mother’s mobile device with the alleged invention can use light and sound level data to determine that a mother and baby are napping and then communicate differing amounts of information about that activity—e.g., “sleeping” or merely “busy”—to various people or groups—e.g., the “Father” or a “Friend”—based upon communication criteria that is predefined by the mother. *Id.* at 15:51-17:44. In this example, the people or groups receiving the information are potential callers who use the information to determine whether a call will be interruptive. *Id.*

FIG. 1

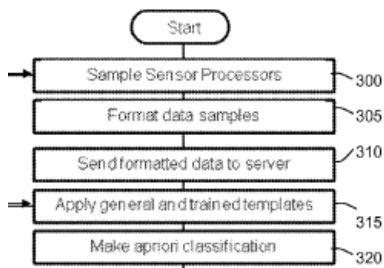
Figure 1 illustrates components of the claimed invention, including the communication device 100 (9:16-21) which must contain an optical sensor 130 to detect an amount of light of an environment (11:62-67) and an acoustic sensor 140 to detect a sound level of the environment (11:52-61), a



memory 160 for storage of the social templates 165 for predefined identifiable user activities, and calculating logic 150 to perform the claimed operations (14:31-37). The social templates 165 in memory 160 are central to the claimed invention in that they contain: (1) the criteria for identifying the user activities (stored as social signatures), and (2) the user-defined relationships governing how information about those activities is communicated to various people or groups (stored as social hierarchies). *See id.* at 15:38-51. In this manner, “[e]ach social signature is indicative of a different type of activity” and the social hierarchy allows the social template to be “programmed to reduce the information to be transmitted based upon user-defined relationships and levels of access.” *Id.*

Figure 3, excerpted below, illustrates the operation of the claimed invention. In operation 300, the optical and acoustic sensor data is first sampled by the processor, detecting the amount of light and sound level of the environment of the communication device. *Id.* at 18:47-52. In

FIG. 3



operation 305, the detected social signature is created by formatting the optical and acoustic data samples. *Id.* at 18:54-56. In operation 315, the detected social signature is compared to the stored social templates. *Id.* at 18:64-65. In operation 320, the processor selects a social template to be assigned based on the closest match between the detected social signature composed of formatted sensor data and the stored social signatures associated with each social template. *Id.* at 18:65-19:1-4. The social template then determines how much information to provide to a given person or group by referencing the social hierarchy. *Id.* at 20:19-25.

In the example of the mother and baby sleeping, the specification explains that “where the social signature is that of the mobile phone user and baby napping, the social template is for do-not-disturb-due-to-Mother-and-baby-sleeping as set forth in Tables 1 and 2.” *Id.* at 15:53-55.

TABLE 1

do-not-disturb-due-to-Mother-and-baby-sleeping social signature	
Sensor	Value range
Location	39.78° N, 104.88° W ± 5 m
Inertial	0 m/s ² ± .2 m/s ²
Optical	223 lm ± 15 lm
Acoustic	-63 db ± 5 db

TABLE 2

do-not-disturb-due-to-Mother-and-baby-sleeping social hierarchy	
Social Hierarchy	Information
First Social Hierarchy Level - Father	Provide information on location, duration of state, and estimate of baby sleep time
Second Social Hierarchy Level - Friend	Provide information on baby sleeping
Third Social Hierarchy Level - School, Work	Do not disturb except in emergency
Fourth Social Hierarchy Level - Strangers	Do not disturb

Table 1 illustrates the identification of the user’s activity based upon sensor data. If the user’s mobile device detects both a low level of light and no sound, “the calculating logic 150 compares the detected social signature with the social signature of the social templates 165 included in the memory 160, and selects the social template for do-not-disturb-due-to-Mother-and-baby-sleeping as being the closest match to the detected social signature.” *Id.* at 16:19-24. Table 2 illustrates that the selected social template then applies the identified social hierarchy to determine the appropriate amount of information to provide to predefined categories of people who may attempt to communicate with the mother. *Id.* at 16:24-25. Here, “the Mother [can predetermine] the degrees of information to be provided to various categories of potential callers (i.e., Father, Friend, Neighbor, Office, School, Stranger etc.).” *Id.* at 17:32-36. The result is that “the social template

1 provides a high level of information to the Father so that the Father can make an informed choice
2 about whether to place the call, or to instead send an email or text.” *Id.* at 16:33-36. A friend will
3 receive less information than the Father so that the friend can also make an informed choice “but
4 without being given as much detail.” *Id.* at 16:37-44.

5 **III. LEGAL STANDARDS**

6 The claims of a patent define the scope of the invention. *See Markman v. Westview*
7 *Instruments, Inc.*, 517 U.S. 370, 373 (1996). The claims themselves and the context of the
8 surrounding words can be “highly instructive” in resolving the meaning of the term. *Phillips v.*
9 *AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005). Other claims in a patent may also provide
10 valuable contextual cues for deciphering the meaning of a term. *Id.*

11 “Claims must be read in view of the specification, of which they are a part.” *Honeywell*
12 *Int’l, Inc., et al. v. ITT Indus., Inc.*, 452 F.3d 1312, 1318 (Fed. Cir. 2006) (*quoting Phillips*, 415
13 F.3d at 1315). “The construction that stays true to the claim language and most naturally aligns
14 with the patent’s description of the invention will be, in the end, the correct construction.”
15 *Phillips*, 415 F.3d at 1316. Consequently, the specification is “[u]sually . . . dispositive; it is the
16 single best guide to the meaning of a disputed term.” *Vitronics Corp. v. Conceptronic, Inc.*, 90
17 F.3d 1576, 1582 (Fed. Cir. 1996); *Phillips*, 415 F.3d at 1314-17. The claims cannot enlarge what
18 is patented beyond what the inventor has described in the specification as the claimed invention.
19 *Netword, LLC v. Central Corp.*, 242 F.3d 1347, 1352 (Fed. Cir. 2001). Even where a patentee
20 expresses intention to include other embodiments, if “[n]o other [embodiment] is disclosed or
21 suggested,” the sole embodiment is limiting. *Honeywell, Inc.*, 452 F.3d at 1319. A patentee may
22 act as his own lexicographer by using the specification to define terms either expressly or “by
23 implication.” *Vitronics*, 90 F.3d at 1582. If the specification reveals a definition of a claim term
24 that is different from how that term would otherwise be used, then “the inventor’s lexicography
25 governs.” *See Phillips*, 415 F.3d at 1316. The prosecution histories are also “intrinsic evidence,”
26 and must be considered by the Court. *Phillips*, 415 F.3d at 1317. A patentee is not allowed to
27 recapture through claim construction the claim scope it relinquished during prosecution. *Omega*
28 *Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003).

A court may also look to extrinsic evidence, which “can shed useful light on the relevant art.” *Phillips*, 415 F.3d at 1317. Dictionaries and other sources of extrinsic evidence are useful in claim construction, “so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents.” *See id.* at 1322-1323.

IV. CONSTRUCTION OF DISPUTED CLAIM TERMS³

A. “social signature”

TERM OR PHRASE	E.DIGITAL’S CONSTRUCTION	DROPCAM’S CONSTRUCTION
“social signature”	“raw or processed data and/or other information based on sensors”	“combination of optical sensor data and acoustic sensor data indicative of a type of activity”

The parties agree that a “social signature” involves data and sensors but disagree whether the “social signature”: (1) includes other information in addition to or instead of sensor data; (2) includes a combination of optical and acoustic sensor data; and (3) indicates a type of activity.

1. The “social signature” is created from received sensor data.

All claims require that the “social signature” is constructed from the detected sensor data. *See e.g.*, ’618 patent at 23:27-29, cl. 1 (“creates a detected social signature from the received sensor data”); 24:45-46, cl. 6; 25:66-67, cl. 15; 27:4-5, cl. 20; 27:34-35, cl. 22. e.Digital ambiguously broadens the term to allow a social signature to consist of sensor data and/or *other information* based on sensors. e.Digital, however, offers no guidance as to what this other information is, how it is “based on” sensors, or what is actually created from the sensor data (i.e. the “social signature”). Nor does e.Digital point to any support in the claims, specification, or prosecution history for its assertion that the social signature can include anything other than the received sensor data. Thus, e.Digital’s unsupported inclusion of the ambiguous language “and/or other information” should be rejected, as it renders the claim term meaningless.

2. The “social signature” must include a combination of at least optical and acoustic sensor data.

e.Digital disputes that the “social signature” is a combination of optical and acoustic sensor

³ For ease of reference, Dropcam presents the disputed claim terms in the same order presented in the parties’ Joint Claim Construction and Pre-Hearing Statement. Dkt. No. 49.

1 data, but on their face, all claims require that the detected sensor data includes “a first detected
2 sensor value . . . from an optical sensor and a second detected sensor value . . . from an acoustic
3 sensor.” *See e.g., id.* at 23:10-16, cl. 1; 24:28-34, cl. 6; 26:1-7, cl. 15; 27:5-12, cl. 20; 27:35-42, cl.
4 22. The specification further makes clear that the disclosed “social signature” is composed of both
5 optical and acoustic sensor data. *See e.g., id.* at Table 1 (displaying “social signature” that
6 includes both “Optical” sensor data and “Acoustic” sensor data); *id.* at 15:38-45 (“when . . . the
7 optical information indicates a dim room and the acoustic information indicates rhythmic
8 breathing, the social signature is that of the mobile phone user and baby napping”).

9 In addition, the claimed “social signature” is not merely composed of raw data from
10 sensors, but rather is a formatted **combination** of sensor data. As explained above, the claims
11 require that the processor receives both optical and acoustic sensor data and then “creates a
12 detected social signature from the received sensor data.” *Id.* at 22:27-29, cl. 1. Thus, as further
13 explained in the specification, the “social signature” is “a combination” of all collected sensor data
14 “formatted for processing.” *Id.* at 14:22-24; *see also* Table 1. Indeed, e.Digital acknowledges that
15 the “social signature” is a “compilation of information.” Op. Br. at 8. While the claims and
16 specification are clear that more is required of the “social signature” than simply the raw,
17 unformatted sensor data, e.Digital’s impermissibly broad construction attempts to rewrite the
18 claims to replace the created “social signature” with raw sensor data.

19 Further, the requisite combination of at least optical and acoustic sensor data is confirmed
20 by the requirement in all claims for determining the greatest correspondence between the created
21 social signatures and the stored social signatures “through comparison of the first and second
22 detected sensor values [of the created social signature] and the first and second sensor value
23 ranges [of the stored social signatures].” *See e.g.,* ’618 patent at 23:29-33, cl. 1; 24:46-51, cl. 6;
24 26:8-13, cl. 15; 27:43-28:4, cl. 22. To allow such comparison, the social signatures must include
25 both the optical sensor data (i.e. first detected sensor value) and acoustic sensor data (i.e. second
26 detected sensor value). In view of such claim requirements, e.Digital’s argument that the claimed
27 “sensor value range” need not be comprised of optical sensor data and acoustic sensor data, just
28 that it be comprised of two different value ranges of any type, is demonstrably flawed. Op. Br. at

1 6. For example, e.Digital proposes that “simply [the] (1) length and (2) width” of a room may
2 comprise the “social signature” (*id.*) at odds with the claim language requiring detection and
3 comparison of optical and acoustic sensor values. *See e.g.*, ’618 patent at 23:10-16, 29-33.

4 Further, e.Digital misinterprets Dropcam’s construction as narrower than it actually is,
5 while ignoring the over breadth of its own proposal. Contrary to e.Digital’s assertion, Dropcam’s
6 proposed construction does not exclude sensor data types other than optical and acoustic, it merely
7 reflects the claim requirements that ***at least*** optical and acoustic sensor values be included in the
8 “social signature.” *See* Op. Br. at 6. In contrast, e.Digital argues that a “social signature”
9 comprised of data from a ***single*** sensor that is neither optical not acoustic would satisfy the claims.
10 *Id.* e.Digital relies upon a dependent claim to argue that the asserted patents allow the use of other
11 sensor data, such as data from a single Wideband sensor, instead of—and at the exclusion of—
12 data from optical and acoustic sensors. *Id.* This is at odds with the limitations “recited in each
13 independent claim and []accordingly incorporated by reference into every dependent claim,”
14 which explicitly require the detection and transmission of sensor data from each of an “optical
15 sensor” and an “acoustic sensor” and the subsequent creation of a social signature from the
16 received sensor data. *Hutchins v. Zoll Medical Corp.*, 492 F.3d 1377, 1382 (Fed. Cir.
17 2007) (citing 35 U.S.C. § 112 ¶ 4 (“A claim in dependent form shall be construed to incorporate
18 by reference all the limitations of the claim to which it refers.”)). *See* cls. 1, 8, and 17 of the ’522
19 patent; cls. 1, 5, 10, 14, 21, 26, and 30 of the ’514 patent; cls. 1 and 19 of the ’523 patent; cl. 1 of
20 the ’524 patent; cls. 1, 6, 15, 20, and 22 of the ’618 patent; cls. 1 and 19 of the ’619 patent.
21 Moreover, e.Digital’s construction requires more than one sensor and, therefore, is inconsistent
22 with its argument that a single sensor can satisfy the claims.

23 **3. The social signature must be indicative of a user activity.**

24 Based upon Dropcam’s construction of “social signature” as indicative of a user activity,
25 e.Digital incorrectly asserts that Dropcam does not understand the components of the asserted
26 patents (Op. Br. At 8). But Dropcam’s construction is consistent with the specification and claims,
27 and what e.Digital believes it invented is irrelevant. The specification is explicit that “[e]ach
28 social signature is indicative of a different type of activity.” ’618 patent at 15:38; *see e.g., id.* at

1 9:23-29 (“[a] **user’s activity** is classified based on the set of social statistics obtained from the
2 sensors”); 14:63-66 (“when enough events indicative of a particular **user social activity** are
3 detected, the calculating logic 150 identifies the **activity** as being performed by the user.”)
4 (emphases added). Indeed, the sole purpose of the claimed “social signature,” and the invention
5 itself, is the identification and communication of user activity. *See e.g., id.* at 9:16-17
6 (“Embodiments of the present invention are designed to monitor **social activity** using multiple
7 sensors.”); 14:58-62 (“the calculating logic 150 identifies a **user’s social activity** by monitoring
8 for different social signatures”) (emphases added). In cases such as this, with clearly limited
9 disclosure, the claims cannot enlarge what is patented beyond what the inventor has described in
10 the specification as the claimed invention. *Netword, LLC*, 242 F.3d at 1352; *see also Alloc, Inc. v.*
11 *Int’l Trade Comm’n*, 342 F.3d 1361, 1370 (Fed. Cir. 2003) (limiting claims where specification
12 read as a whole suggests that invention requires limitation be part of every embodiment).

13 But e.Digital’s proposed construction neglects this pivotal element of the claim term.
14 e.Digital’s argument that the “social signature” does not indicate an activity suffers from the same
15 flaw as its construction, namely e.Digital fails to recognize the differences between the claimed
16 “social signature” and raw sensor data. e.Digital erroneously points to data collected from
17 individual sensors as examples of what the claimed “social signature” may identify.⁴ *See Op. Br.*
18 at 8 (“a map location, the availability of a user, an unusually high heart rate, that a device is not
19 being used, that a device is outside, or that a room surrounding the communication device is
20 empty”). But, as explained above, it is this type of unprocessed data obtained directly from
21 individual sensors—e.g. a “location sensor” (9:38-39), “sensors which detect heart rate” (9:51),
22 “sensors compris[ing] an input device which . . . detects . . . non-use of the input device” (7:32-
23 35), “sensors [which] detect . . . that the mobile device . . . is outside” (12:10-13), or “proximity
24 sensors” (9:53)—that is used to construct a social signature. ’618 patent. The constructed social
25 signature is then used to determine a type of activity such as “driving, napping, in a meeting,
26

27 ⁴ Nor are these sensor data readings indicative of ‘status,’ which refers to results of the social
28 signature analysis. *See e.g.,* ’618 patent at 17:58-61 (using social signature analysis to determine
“new status of the baby”); 20:40-65 (using social template analysis to “chronicle a user’s status”).

showering.” *Id.* at 9:23-29. The “social signature” does not, as e.Digital argues, identify mere sensor readings, such as a location or a heart rate. Op Br. At 8. Thus, here again, e.Digital attempts to rewrite the claims to replace the claimed “social signature” with raw sensor data.

B. “social hierarchy”

TERM OR PHRASE	E.DIGITAL’S CONSTRUCTION	DROPCAM’S CONSTRUCTION
“social hierarchy”	“an arrangement of persons, things, information and/or operations in a series of levels”	“ordered ranking of social groups defined within each social template”

The parties agree that the claimed “social hierarchy” is an organized structure, but the parties disagree as to the form and content of the organization, specifically: (1) whether the organization is an ordered ranking or an arrangement; (2) what is being organized; and (3) whether the “social hierarchy” must exist within each social template.

1. The organization of the “social hierarchy” must be an ordered ranking.

All claims of the patents require that the hierarchy is organized in “levels” corresponding to differing amounts of information. *See, e.g.*, ’618 patent at 23:22-24, cl. 1 (“for each level of the predetermined social hierarchy, a corresponding differing amount of information”); 24:23-25, cl. 6; 26:16-16, cl. 15; 27:20-22, cl. 20; 28:7-9, cl. 22. The specification confirms that the required levels are ranked from greatest to least amount of provided information. For example, the specification illustrates the “social hierarchy” in Table 2 as containing four rankings of information disclosure regarding the “do-not-disturb-Mother-and-baby-sleeping.” The hierarchy begins with the First Social Hierarchy Level containing “a high level of information” to be given to the Father. *Id.* at 16:28-36. This is followed by the Second Social Hierarchy Level containing “less information” to be given to the friend. *Id.* at 16:37-44. The Third Social Hierarchy Level is described as containing “even less information” to be given to the school/office. Finally, the Fourth Social Hierarchy Level contains virtually no information, communicating only that the user does not want to be disturbed to a stranger. *Id.* at 16:45-51. In this way, the asserted patents consistently require that the levels of the “social hierarchy” must be specifically ranked in order of information disclosure. *See e.g., id.* at 4:17-23 (“the first social hierarchy level provides information including a desired contact state, the map location and the environment, the second

1 social hierarchy level provides information including the desired contact state and the environment
2 but not the map location, and the third social hierarchy level provides information on only the
3 desired contact state”), 15:45-51 (“The social template would then be programmed to reduce the
4 information to be transmitted based upon user-defined relationships and levels of access.”), 6:12-
5 21, 14:44-50, 15:18-31. Further, the very meaning of a “hierarchy” requires tiered classifications,
6 ordered by rank or importance. *See* Ex. A, *Chambers Concise Dictionary*, at 562.

7 e.Digital concedes that a hierarchy is defined as “a graded series.” Op. Br. at 11. Even
8 though e.Digital further concedes, as it must, that the “social hierarchy” has levels organized by
9 how much information is provided, e.Digital’s proposed construction abandons the hierarchical
10 nature of the “social hierarchy” by allowing it to be organized as a generic arrangement. *Id.* at 11-
11 12. Such an unspecified arrangement would allow levels of the “social hierarchy” to have no
12 discernable distinction from each other, a result that is contrary to every embodiment and the plain
13 meaning of “hierarchy.” e.Digital also misreads the specification, misunderstanding the disclosure
14 of a “single level of social hierarchy for a social networking service” as meaning there is only a
15 single level in the entire hierarchy, rather than that there is one level of the social hierarchy that is
16 associated with a social networking service. Op. Br. at 12. But while e.Digital erroneously
17 complains that a hierarchy with just one level cannot be an “ordered ranking,” e.Digital misses the
18 point that an arrangement limited to only one level is not a hierarchy. *See id.* at 11.

19 **2. The “social hierarchy” must rank social groups containing members.**

20 The asserted patents require that social groups are organized in the hierarchy. First, all
21 claims of the asserted patents require the “social hierarchy” to contain members with whom
22 information is shared. *See e.g.*, ’618 patent at 23:23-25, cl. 1 (“each member of the predetermined
23 social hierarchy”); 24:4-6, cl. 3 (“the processor detects to which of the first social hierarchy level,
24 the second social hierarchy level, and the third social hierarchy level each member belongs”);
25 24:35-37, cl. 6; 25:30-34, cl. 9; 26:35-37, cl. 15. Second, the specification makes clear that the
26 claimed members with whom information is shared are members of social groups. For example,
27 “user-defined relationships” determine “how much information is provided to a category of
28 communicant hoping to access the mobile phone user.” *Id.* at 15:45-51. As described, the social

1 hierarchy contains a “set of hierarchical social classifications” according to which information is
2 “potentially available to a more select social group.” *Id.* at 14:39-50. This tiered organization of
3 social groups is demonstrated in Table 2, assigning different social groups—Father, Friend,
4 School/Work, Strangers—to levels of a social hierarchy. *Id.* at Table 2.

5 e.Digital admits that for “each of the embodiments described in the patents and in the
6 claims, different types of information are automatically made available to *people* or [social
7 networking] *websites*.” Op. Br. at 11 (emphasis added). Yet, in contrast to Dropcam’s
8 construction, e.Digital’s construction reads social out of “social hierarchy” by allowing the
9 hierarchy to include the non-social categories of things, information, and/or operations. Contrary
10 to the specification and e.Digital’s own admission, its nonsensical proposed construction—when
11 inserted into the claims—would allow the sharing of different types of information with “an
12 arrangement of information.” It is telling that e.Digital does not provide an example of any such
13 arranged things, information, or operations because no such examples exist in the intrinsic record.

14 **3. The “social hierarchy” is defined within the social template.**

15 Finally, the asserted patents require that a “social hierarchy” must be defined within each
16 social template. Contrary to e.Digital’s assertion that the claims are silent as to where the “social
17 hierarchy” is defined (Op. Br. at 12), the claims explicitly require that each social template have a
18 “social hierarchy,” referring to “the levels of the social hierarchy *of the retrieved social*
19 *template*.” ’618 patent at 23:60-61, cl. 3 (emphasis added); 25:19-20, cl. 9; 27:24-25, cl. 20
20 (“social template having the assigned social signature and social hierarchy”). Moreover, all claims
21 rely upon the selected “social template” to provide the appropriate amount of information “to each
22 member of the predetermined social hierarchy.” *See e.g., id.* at 23:22-25, cl. 1; 24:4-8, cl. 3
23 (“provides only as much information as allowed based on the retrieved social template”); 24:23-26,
24 cl. 6; 26:35-37, cl. 15. Thus, a “social hierarchy” must be defined for each social template in order
25 to specify how information pertaining to that template will be provided.

26 The specification also consistently describes that social hierarchy levels are defined within
27 the social template, and Table 2 provides the clearest example by illustrating each defined level of
28 the social hierarchy within the social template for the Mother and baby sleeping. *Id.* at 15:52-

16:13; 14:53-54 (“[e]ach set of hierarchical social classifications is stored in a separate social template”); 16:28-30 (“social template is programmed to give the Father the First Social Hierarchy Level”); 16:66-67 (“social hierarchy level could be changed for each social template”); 17:5-7.

C. “social template”

TERM OR PHRASE	E.DIGITAL’S CONSTRUCTION	DROPCAM’S CONSTRUCTION
“social template”	“parameters and/or information for analysis of social signatures”	“data structure storing a social signature and a social hierarchy”

The parties agree that the claimed “social template” relates to the “social signature.” The disagreement pertains to whether the “social template”: (1) stores a social signature and a social hierarchy; and (2) is properly defined as a data structure or parameters and/or information.

1. A “social template” has at least one social signature and a social hierarchy.

As explained above in Section IV.B.3, each “social template” has a social hierarchy defined within it that specifies how the information for that template is provided to potential callers. *See, e.g., id.* at 14:53-54. The claims also require that, in addition to the social hierarchy, the “social template” has at least one social signature. *See e.g., id.* at 27:24-25, cl. 20 (“social template having the assigned social signature and social hierarchy”); 28:27-28, cl. 23 (“the determined one social template incorporates the detected social signature”); 28:38-39, cl. 24.

Tables 1 and 2—the sole pictured example of social templates provided in the specification—demonstrate that the claimed social template must contain both a social signature (Table 1) and a social hierarchy (Table 2). *Id.* at 15:53-16:12 (“[T]he social template is . . . set forth in Tables 1 and 2.”). *See Wang Labs., Inc. v. Am. Online, Inc.*, 197 F.3d 1377, 1383 (Fed. Cir. 1999) (holding where specification discloses single embodiment, “claims [are] correctly interpreted as limited thereto”). The specification also explicitly refers to the social signature as part of the “social template.” For example, with reference to Figure 1, the specification explains that “the social signature of the social templates 165 included in the memory 160” is used for the comparison and selection of “the social template for do-not-disturb-due-to-Mother-and-baby-sleeping.” ’618 patent at 16:20-23; *see also id.* at 17:30-36, 18:54-56. The social signature must therefore be a part of the social template in order to permit comparison of the detected sensor data with a social signature for identification of the correct “social template.” Furthermore, contrary to

1 e.Digital's narrow reading of Dropcam's proposed construction, inclusion of the singular "a" does
2 not limit the number of social signatures that may be associated with a given social template, it
3 merely requires that *at least* one social signature be included therein. *See* Op. Br. at 10.

4 Further, during prosecution, the applicant disclaimed any social template that does not
5 have each of a social signature and a social hierarchy. *Seachange Int'l Inc. v. C-COR Inc.*, 413
6 F.3d 1361, 1372-1373 (Fed. Cir. 2005) (where an applicant distinguishes its claims to overcome a
7 prior art rejection, argument may narrow scope of claim). In distinguishing the claimed invention
8 over the prior art, the applicant explained that the prior art "contact record" was not a "social
9 template" on the basis that it had no social hierarchy where the "privacy settings" were not stored
10 in the "contact record" like the social hierarchy is stored in the "social template." Ex. B, '618
11 Prosecution History, March 16, 2012 Applicant Arguments/Remarks at p. 5. e.Digital may not
12 now construe "social template" beyond the scope to which it limited itself during prosecution.

13 Ignoring the consistent intrinsic record requiring a "social template" to perform the social
14 hierarchy function, e.Digital erroneously argues that the "social template" has only a single
15 primary function related to the matching of social signatures. Op. Br. at 9-10. If the social
16 hierarchy were not defined within each "social template," it would not be possible for "social
17 template" to provide "information to each member of the predetermined social hierarchy"—as
18 required by every independent claim of the asserted patents. *See e.g.*, '618 patent at 23:22-25, cl.
19 1. e.Digital similarly ignores the pictured example of a "social template" shown in Tables 1 and 2,
20 in which the claimed template is shown including both a social signature *and* a social hierarchy.

21 **2. The "social template" must be a stored data structure.**

22 The claims require that the "social template" must be stored. *See e.g., id.* at 23:18, cl. 1 ("a
23 memory which stores social templates"); 24:19, cl. 6; 26:12-13, cl. 15; 27:27, cl. 20. The
24 specification mirrors this requirement. *See e.g.*, at 16:20-23 ("the social templates 165 included in
25 the memory 160"). The example in Tables 1 and 2 further demonstrates that a "template" of two
26 tables is stored and populated with data for social signatures and the corresponding social
27 hierarchy. *See id.* at Tables 1 and 2. Consistent with the ordinary meaning of the word 'template,'
28 the claimed "social template" is an empty form, to be filled in with information regarding user

activities and levels of information disclosure about those activities. *See* Op. Br. at 10 (quoting Merriam Webster Dictionary at 736). While e.Digital concedes that a “template” is a “gauge, mold or pattern that functions as a guide to the form or structure of something,” e.Digital’s proposal—parameters and/or information—renders “template” meaningless. *Id.*

D. “unique social signature”

TERM OR PHRASE	E.DIGITAL’S CONSTRUCTION	DROPCAM’S CONSTRUCTION
“unique social signature”	“a specific, currently associated social signature”	“social signature associated solely with one social template”

The parties agree that “unique social signature” indicates an association between a “social signature” and something else. While Dropcam’s proposed construction makes clear that a “unique social signature” is associated with—i.e., unique to—a given social template, e.Digital’s proposed construction fails to specify what the social signature is associated with, offering no guidance to the finder of fact regarding the meaning of “unique.”

Dropcam’s construction is consistent with the claims, which require that “each social template correspond[s] to a unique social signature.” *See, e.g.,* ’618 patent at 23:18-19, cl. 1. Any given stored social signature may correspond to only one social template. The primary function of the claimed invention relies upon the comparison of “the detected social signature with the social signature of the social templates 165 included in the memory 160” in order to “select[] the social template” that most closely matches the detected user activity and provide the appropriate amount of information. *Id.* at 16:15-24; *see also id.* at 15:52-67, Table 1 (“do-not-disturb-due-to-Mother-and-baby-sleeping social signature” is associated with “do-not-disturb-due-to-Mother-and-baby-sleeping” social template). It would not be possible to use a detected social signature to select the appropriate social template if the corresponding stored social signature were associated with more than one social template. Dropcam’s construction is further supported by extrinsic evidence that defines “unique” as “something that belongs solely to, or is associated solely with.” Ex. C, *Chambers Concise Dictionary*, at 1360.

While e.Digital speculates that Dropcam’s construction excludes certain embodiments, a straightforward reading of Dropcam’s construction comports with the claims, the specification, and the plain meaning of the term “unique social signature.” *See* Op. Br. at 13. In addition,

Dropcam’s proposed construction does not exclude training or learning, as argued by e.Digital. *Id.* There is nothing in Dropcam’s proposed construction that prevents the “unique social signature” from being differently associated or updated at any time according to the described invention.

E. “sensor value range”

TERM OR PHRASE	E.DIGITAL’S CONSTRUCTION	DROPCAM’S CONSTRUCTION
“sensor value range”	Plain and ordinary meaning or, alternatively, “information representing sensor data above, below or between a value(s)”	“range of measurements between two values”

It is undisputed that a “sensor value range” pertains to the sensor data. The areas of dispute can be summarized as whether “sensor value range” is: (1) properly limited to a “range of measurements” rather than broadly defined to include any “information representing sensor data”; and (2) is bounded between two values or can refer to a single, unbounded, threshold value. In addition, e.Digital’s proposal that plain and ordinary meaning govern should be rejected because it does not resolve the dispute as to the meaning of the term. *See O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008).

1. Sensor values are appropriately limited to measurements.

The claims require that “detected sensor values” be compared to “sensor value ranges of each stored template.” *See e.g.*, ’618 patent at 23:31-33, cl. 1; 24:46-51, cl. 6; 26:8-13, cl. 15; 27:43-28:4, cl. 22. As described, the detected sensor values are measurements generated by the claimed optical and acoustic sensors. *See e.g., id.* at 11:52-54 (“acoustic sensor 140 may generate acoustic measurement data continuously, or at a sampling rate that may be fixed or variable”); 11:62-65 (“optical sensor 130 may generate simple light level measurement data continuously, or at a sampling rate that may be fixed or variable. . . . optical sensor 130 provides the light level measurement”). Thus, to allow for the claimed comparison, the “sensor value range” must be expressed in the same form as the measurements collected by the claimed sensors (i.e., “detected sensor values”). Furthermore, the sole embodiment of the claimed “value range” is shown in Table 1, which refers only to numerical measurements from sensors within certain limits. *See id.* at Table 1, 16:15-27. In other words, the claimed “sensor value range” is limited to sensor measurements expressed in numerical form and is not just any information that merely represents

1 data, as e.Digital proposes. *See Wang Labs.*, 197 F.3d at 1383 (construing claim consistent with
2 sole disclosed embodiment); *Netword, LLC*, 242 F.3d at 1352. e.Digital’s overbroad construction
3 must be rejected as it allows **any** type of information representing sensor data, or a transformation
4 of that data, to constitute the claimed “sensor value range.”

5 **2. A “range” must be between two specified values.**

6 The parties agree that the term “range” refers to the span between two values. In fact,
7 e.Digital concedes that the plain and ordinary meaning of “range” is a value “within limits” and
8 that the ranges disclosed by the asserted patents can be “read as between two values.” *See Op. Br.*
9 at 15 (quoting Barron’s Dictionary of Computer and Internet Terms at 406). In addition, all
10 claims mandate that a range is between two values, requiring that the “detected amount of light [be]
11 **within** the first sensor value range and the detected sound level [be] **within** the second sensor
12 value range.” *See e.g.*, ’618 patent at 23:42-44, cl. 1 (emphasis added); 24:67-25:2, cl. 6; 26:27-29,
13 cl. 15; 27:16-19, cl. 20; 28:18-20, cl. 22. Further, the specification describes the claimed “sensor
14 value ranges” only as bounded measurements. As explained above, Table 1—the only
15 embodiment of a “value range”—demonstrates that each of the various sensors has a “value range”
16 bounded by a minimum and maximum value. ’618 patent at Table 1. These bounded numerical
17 values are the ranges between which the detected sensor measurement must fall in order to match
18 a given stored social signature. For example, the optical sensor light “value range” corresponding
19 to the do-not-disturb-due-to-Mother-and-baby-sleeping social signature is between 208 lm and
20 238 lm (*i.e.* “223 lm ± 15 lm”). *Id.* “Sensor value range” should thus be defined as a range
21 between two values. *See Wang Labs.*, 197 F.3d at 1383.

22 But e.Digital’s proposal allows a “sensor value range” to include infinite data unbounded
23 above or below a single value threshold. This construction is not supported by the disclosures of
24 the asserted patents much less the plain meaning of “range.” In fact, nothing in the patents
25 suggests that a “range” could refer to an open-ended threshold value, and e.Digital improperly
26 resorts to speculation that unbounded threshold values could be “envision[ed].” *Op. Br.* at 15-16.
27 *Honeywell, Inc.*, 452 F.3d at 1319 (holding that where polymer fuel component was only
28 described as “fuel filter,” claimed component was limited despite patentee’s intention to include

additional components). e.Digital chose what to include in the specification to put the public on notice regarding the nature and scope of its claimed inventions. *See United Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 232 (1942). e.Digital must be held to that disclosure and may not rely on speculation regarding what could have been—but was not—included in the specification.

F. “optical sensor”

TERM OR PHRASE	E.DIGITAL’S CONSTRUCTION	DROPCAM’S CONSTRUCTION
“optical sensor”	Plain and ordinary meaning or, alternatively, “sensor that detects one or more amounts and/or characteristics of light within an environment”	“sensor that collects data about the amount of light in an environment”

The parties agree that the claimed optical sensor can detect data about the amount of light in an environment. This agreement is reflected in Dropcam’s proposed construction. In an attempt to discredit Dropcam’s construction in favor of its own overbroad construction, e.Digital mischaracterizes Dropcam’s construction as narrower than it actually is by alleging that it restricts an optical sensor to *only* detecting an amount of light. Op. Br. at 14, 15. To the contrary, Dropcam’s construction accurately reflects the functionality required by an “optical sensor” in the context of the claims and specification of the asserted patents: an “optical sensor” must *at least* collect data about the amount of light in the environment. Nevertheless, e.Digital’s proposed construction incorrectly contemplates that: (1) the sensor detects one or more amounts of light, rather than a single amount at a time; and (2) the sensor detects unspecified characteristics of light in addition to—or *instead of*—the amount of light. But there is simply no disclosure of an “optical sensor” that detects more than one amount of light at a given time or that does not detect the amount of light in the environment. Given the disputed meaning, e.Digital’s proposal that plain and ordinary meaning govern should be rejected. *See O2 Micro Int’l Ltd.*, 521 F.3d at 1361.

1. A single light level measurement is collected at a time.

Every claim refers to the data collected from the “optical sensor” only in terms of a single measurement representing the total amount of light in an environment. *See e.g.*, ’618 patent at 23:10-12, cl. 1 (“a first detected sensor value which includes an amount of light of an environment of the communication device from an optical sensor”). Similarly, the specification states that the “optical sensor 130 may generate simple light level measurement data” and “provides the light

1 level measurement to an optical processor.” *Id.* at 11:62-65; *see also id.* at 12:6-13 (explaining
2 detection of single, light level measurements by CCD sensors as “a low level of light” or “the high
3 level of light”). In order to determine the level of light in the environment, neither the claims nor
4 the specification contemplate detecting “one or more” amounts. *See e.g., id.* at Table 1, 16:17-18,
5 15:43 (“the optical sensor 130 senses a light value of 223 1m” which “indicates a dim room”).
6 There is no support—either in the description of the optical sensor itself or the detection of light
7 amounts—for construing “optical sensor” to detect more than one amount of light at any given
8 time. e.Digital’s proposal improperly broadens the scope of the claims beyond the specification
9 description and should be rejected. *See Network*, 242 F.3d at 1352.

10 2. An “optical sensor” must at least detect an amount of light.

11 The asserted patents require that the optical sensor detect an amount of light in an
12 environment. Every independent claim explicitly includes this limitation. *See e.g.,* ’618 patent at
13 23:12, cl. 1; 24:29-30, cl. 6; 26:3, cl. 15; 27:8, cl. 20; 27:38, cl. 22. The specification similarly
14 demonstrates this requirement, as every mention of the functionality of the “optical sensor”
15 includes measuring an amount of light in an environment. For example, “if the CCD sensors
16 detect *a low level of light*, the mobile device 100 can determine that the mobile device 100 is in a
17 dark location . . . Whereas if the CCD sensors detect *the high level of light*, this could indicate that
18 the mobile device 100 is in use or is merely exposed in a room with the lights on or is outside
19 during the daytime.” *Id.* at 12:6-16 (emphasis added). *See also id.* at 4:24-26 (“an optical sensor
20 which detects an amount of light of the environment . . .”), 19:22-26 (“for the social signature of a
21 social template for watching a movie, the optical sensor could be for a low light”).

22 Dropcam does not dispute that, in addition to an amount of light, other data may be
23 collected by the “optical sensor.” Contrary to e.Digital’s assertion, Dropcam’s proposed
24 construction does not exclude this additional data. *See Op. Br.* at 14, 15. It merely reflects the
25 claim requirements that *at least* an amount of light be detected by the “optical sensor.” In contrast,
26 e.Digital’s construction is directly at odds with the claims and specification, in that it would permit
27 an “optical sensor” that detects other data but cannot detect the claimed amount of light in the
28 environment. *See Op. Br.* at 14. Moreover, e.Digital’s proposed inclusion of characteristics of

light is so broad as to encompass any detectable optical signal and provides no actual guidance as to what is claimed. Finally, e.Digital's argument regarding "other types of sensors in addition to or instead of" the optical sensor provides no insight as to the definition of an "optical sensor." *Id.*

G. "information"

TERM OR PHRASE	E.DIGITAL'S CONSTRUCTION	DROPCAM'S CONSTRUCTION
"information"	Plain and ordinary meaning	"a report about a single event that results from comparison of sensor data with social templates"

The parties fundamentally disagree as to the type of "information" claimed by the asserted patents. While e.Digital argues that no special meaning is attributed to the claimed "information," Dropcam's proposed construction reflects the precise manner in which the term "information" is consistently used in the asserted claims, specifically that "information": (1) results from comparison of sensor data with stored social templates, and (2) describes a single detected event. Where, as here, the intrinsic record indicates a specific meaning of a term distinct from plain and ordinary meaning, construction is necessary⁵. *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Grp., Inc.*, 262 F.3d 1258, 1269-70 (Fed. Cir. 2001) (rejecting ordinary meaning of "mode" in favor of narrow meaning consistent with specification) (citing *Vitronics*, 90 F.3d at 1582).

1. The "information" must result from the social template comparison.

The system and methods described by the asserted patents are not in dispute: sensors detect data from a communication device, the data is formatted into a social signature, the social signature is compared to the stored social templates, the matching social template is selected, and the selected social template shares the specified amount of "information" with members of the social hierarchy. *See* '618 patent at 14:32-41. The result of the comparison is synonymous with the "corresponding differing amount of information [provided] to each member of the predetermined social hierarchy" required by every claim. *See e.g., id.* at 23:23-25, cl. 1; 24:24-26, cl. 6; 26:17-19, cl. 15. The claims also reflect that "information" is the result of the comparison of sensor data with social templates in that they require the provided information to be "based on the

⁵ e.Digital egregiously misstates the law on claim construction.. Op. Br. at 16 (citing *Thorner v. Sony Computer Entm't Am., LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)). There is no requirement that a Court may **only** construe a term where the inventor acted as lexicographer.

1 retrieved social template.” *See e.g., id.* at 24:6-8, cl. 3; 24:35-38, cl. 6; 26:35-37, cl. 15. The plain
2 and ordinary meaning of “information” cannot adequately specify the social signature comparison
3 that must take place before any “information” can be provided by the claimed system or method
4 e.Digital’s proposal must be rejected because it offers no guidance on the special meaning given to
5 the term, including the genesis or content of such “information.”

6 **2. Each social hierarchy level must receive information about the same event.**

7 The asserted patents also require that the claimed “information” shared with each level of
8 the social hierarchy must pertain to the same event. As explained in the specification, and
9 described above, the claimed invention compares a detected social signature to stored social
10 templates to determine the user activity, “where[after] a single event would be reported in multiple
11 ways” based on the social template. *Id.* at 15:29-31. For example, the specification describes the
12 comparison of detected sensor data with stored activities to determine that a user is having a latte
13 with a friend at a coffee shop. However, “the social template may allow specific friends to know
14 that he is drinking coffee at the coffee shop, may allow his co-workers to know that he is in a
15 personal meeting, and only allow the rest of the world to know that he is busy and should not be
16 disturbed.” *Id.* at 15:18-31. Thus, the information shared with each of the social hierarchy levels
17 (i.e. friends, co-workers, and everyone else) is reporting the same event (i.e. having a latte at a
18 coffee shop) in multiple ways. “Information” is therefore restricted to be about a single event.

19 e.Digital misunderstands the claimed invention in this regard, confusing the differing
20 amounts of information provided to the social hierarchy as representing different events. *See Op.*
21 *Br.* at 17. e.Digital argues incorrectly that where a detected event is not fully disclosed to a
22 particular level of the social hierarchy, such as in the example above where the user is drinking
23 coffee but prefers that co-workers know only that he is in a personal meeting, somehow a different
24 event is being reported. *Id.* But such an understanding runs afoul of the asserted patents
25 themselves, which require the sharing of “information” with different social groups regarding the
26 identified user activity and in accordance with the selected social template. *See e.g.,* ’618 patent at
27 4:17-23; 15:45-51. Despite the description provided by the asserted patents to the contrary,
28 e.Digital once again resorts to speculation as to a “conceivable” understanding of the term

“information” rather than the meaning actually described by patentee. *See* Op. Br. at 18. Such speculation beyond and contrary to the disclosure in the specification must be rejected. *Honeywell, Inc.*, 452 F.3d at 1319. Finally, e.Digital’s assertion that the claimed “information” is not a report (Op. Br. at 17), ignores the consistent disclosure in the specification that the claimed “information” must be “reported.” *See e.g.*, ’618 patent at 15:23-24; 15:29-30; 15:32-33; 20:25.

H. “provide/ provides/ providing differing levels of information”

TERM OR PHRASE	E.DIGITAL’S CONSTRUCTION	DROPCAM’S CONSTRUCTION
“provide/ provides/ providing differing levels of information”	Plain and ordinary meaning	“send/sends/sending information in varying levels of granularity”

The parties disagree that the term “provide differing levels of information” requires construction. Dropcam’s proposal is necessary to accurately reflect how the term is used in the asserted patents, specifically: (1) “providing” requires an affirmative action to send the “information;” and (2) “levels of information” must be of varying degrees of granularity.

1. In the context of the asserted patents, “provide” means send.

While e.Digital argues that any means of sharing the claimed information satisfies the asserted patents (Op. Br. at 18), the asserted patents require more. The specification describes only a system that “provides communication with respect to external devices and sends the information as defined in the retrieved social template.” *Id.* at 3:52-55; *see also*, 24:39-42, cl. 6. The passive availability of information advocated by e.Digital (Op. Br. at 18-19) cannot satisfy the goal of the claimed invention. For example, the patents contemplate that the claimed system could be used to prevent intrusive phone calls by providing information directly to a person calling the user’s mobile phone instead of allowing the call to pass through. *See, e.g.*, ’618 patent at 18:34.37. The patents also contemplate social templates that “automatically provide information to the police, fire department, family and/or friends” in the form of “text messages, emails, computer read messages *sent* to a voice line.” *Id.* at 21:7-12 (emphasis added). Although e.Digital again resorts to its imagination, proposing possible embodiments “not discussed in the specification,” claim construction must be limited to those embodiments actually disclosed by the patentee. *See* Op. Br. at 18; *Honeywell, Inc.*, 452 F.3d at 1319. The provided information must therefore be

1 affirmatively sent to targeted recipients as defined in the social template, for that is how the
2 applicant used the term “provide.” *See Vitronics*, 90 F.3d at 1582.

3 **2. Levels of information must differ only in amount of disclosure.**

4 While the claims do not specify how the claimed “levels of information” must “differ[,]”
5 the specification provides clarity that the only correct interpretation pertains to the granularity of
6 the provided information. Indeed, e.Digital concedes that the information reported to the levels of
7 the social hierarchy differs by the amount of disclosure. *See Op. Br.* at 12. To achieve these
8 differing amounts of disclosure, the specification explains that “each social template can be set up
9 with varying levels of granularity in so far as who is given which information about the user of the
10 mobile device 100 prior to the call being placed.” ’618 patent at 17:13-16. Providing information
11 in varying levels of granularity is consistent with the purpose of the claimed invention to report
12 detected user activity to levels of the social hierarchy in multiple ways according to the selected
13 social template. *See e.g., id.* at 15:45-51 (“[T]he calculating logic 150 selects the social template
14 to select how much information is provided to a category of communicant hoping to access the
15 mobile phone user. The social template would then be programmed to reduce the information to be
16 transmitted based upon user-defined relationships and levels of access.”), 4:17-23 (“the first social
17 hierarchy level provides information including a desired contact state, the map location and the
18 environment, the second social hierarchy level provides information including the desired contact
19 state and the environment but not the map location, and the third social hierarchy level provides
20 information on only the desired contact state”), 6:12-21, 14:44-50, 15:18-31.

21 Returning to the example of the mother and baby napping, the four levels of the Social
22 Hierarchy shown in the embodiment of Table 2 are each assigned corresponding different amounts
23 of information about the do-not-disturb-Mother-and-baby-sleeping social signature because the
24 Mother has “enter[ed] the degrees of information to be provided to various categories of potential
25 callers (i.e., Father, Friend, Neighbor, Office, School, Stranger etc.).” *Id.* at 17:30-36. The Father
26 is told “that the mobile device 100 of the Mother is with the baby, the location, for how long, and
27 who is napping (both Mother and Baby or Baby only),” the neighbor is told only “that the Baby is
28 sleeping,” the office is told that the mobile phone user does not want to be disturbed, except in an

1 emergency, and strangers are told only that the user does not want to be disturbed. *Id.* at 16:28-51.
2 Just as the levels of the social hierarchy are ranked in order of information disclosure, the
3 information sent to those levels differs in amount of disclosure, i.e., the granularity of the
4 information provided. Thus, e.Digital’s proposal that the plain and ordinary meaning of “differing”
5 govern is insufficient to capture the meaning given to the term by the asserted patents, and the
6 Court should adopt Dropcam’s construction. *See Bell Atl. Network Servs.*, 262 F.3d at 1269-70.

7 **I. “provided.../ provides/ providing an update”**

TERM OR PHRASE	E.DIGITAL’S CONSTRUCTION	DROPCAM’S CONSTRUCTION
“provided.../ provides/ providing an update”	Plain and ordinary meaning	“sent/sends/sending information indicating a user’s status”

10 Here again, Dropcam’s proposed construction is necessary to capture how the term is used
11 in asserted patents, which require that: (1) “providing an update” requires an affirmative action to
12 send the “update;” and (2) the “update” indicates a user’s status.

13 **1. In the context of the asserted patents “provide” means send.**

14 As used in the asserted patents, the term “provide” in “provide[] an update” has the same
15 special meaning as in “provide differing levels of information” discussed above, i.e., it means send.
16 The specification explicitly states that claimed invention must “*send* or update specific
17 information to one or more social networking services and/or microblogs.” ’618 patent at 20:42-
18 46 (emphasis added). The claimed system can also “provide constant feeds and updates to . . . a
19 user’s social and professional networking site(s) and/or issue microblogs such as tweets.” *Id.* at
20 20:65-21:3. The described “constant feeds” or “publishing” of tweets requires more than mere
21 placement of information on a server, as argued by e.Digital (Op. Br. at 19), but rather, requires
22 the active transmission of “any necessary log in and username information needed to authorize the
23 social networking services and/or microblogs” and requires that these services actually “receive
24 such updates.” ’618 patent at 20:46-50. Although e.Digital asserts that no construction is
25 necessary, it nevertheless offers extrinsic dictionary evidence that is consistent with the
26 specification and supports Dropcam’s proposed construction. *See* Op. Br. at 20. In particular,
27 e.Digital acknowledges that microblogs require “publishing,” an affirmative act to send
28 information. *Id.* Thus, “providing an update” must require the sending of an update.

1 **2. “Update” must describe a user’s status.**

2 Certain of the claims require that one level of the social hierarchy requires that the
3 processor “provides an update to the social networking service.” or “provides an update to the
4 microblogging service.” *See, e.g.*, ’514 patent at 23:60-63, cl. 3; 23:64-67, cl. 4. The specification
5 explains that the provided update pertains to a user’s status, for example in a status update on a
6 social networking site. Specifically, the claimed invention “could chronicle a user’s status, and
7 could provide different updates to different social networking services. For instance, a user in a
8 coffee shop might want to update their social networking site (such as FACEBOOK) to indicate to
9 users that they are at the coffee shop . . . A similar chronicle of the user’s status could be provided
10 on TWITTER or other microblog site.” ’618 patent at 20:53-65. Consistent with the discussion
11 above in section IV.G.2 regarding the sharing of “information” pertaining to a user activity, just as
12 “the social template may allow specific friends to know that [a user] is drinking coffee at the
13 coffee shop,” the social template may update a user’s FACEBOOK status to indicate the user’s
14 current activity is “having a tall, soy latte.” *Id.* at 15:18-31. Although e.Digital argues that other
15 types of updates “could [be] easily imagine[d],” the only type of update described by the asserted
16 patents relates to a user’s status, and e.Digital may not expand the scope of its claims beyond that
17 disclosed in the specification. *See Op. Br.* at 20; *Honeywell, Inc.*, 452 F.3d at 1319. The plain and
18 ordinary meaning does not capture this specific understanding of “providing an update” as
19 required by the claims. *See Bell Atl. Network Servs.*, 262 F.3d at 1269-70.

20 **J. “accurate”**

TERM OR PHRASE	E.DIGITAL’S CONSTRUCTION	DROPCAM’S CONSTRUCTION
“accurate”	“capable of desired processing”	“free from mistakes or errors”

23 e.Digital proposes a circular definition of the term “accurate,” departing from the
24 customary meaning and the use of this term in the asserted patents, whereas Dropcam proposes a
25 simple definition that reflects both the claim requirements and plain and ordinary meaning that
26 accuracy be determined by the absence or presence of errors.

27 The parties appear to agree on the operation of the claimed training process. *Op. Br.* at 21-
28 23. The claims require that upon the detection of an error between the detected social signature

1 and the stored social signature, the social template must be either: (1) confirmed as accurate,
2 whereby the social signature stored within the social template is updated; or (2) confirmed as not
3 accurate, whereby a new social template is created that includes the detected error in the social
4 signature. *See id.* at 21-22 (citing '618 patent, cl. 15). The specification similarly describes, and
5 e.Digital does not dispute that, upon the detection of an error, the accuracy of the social template is
6 called into question, and the error may be confirmed or rejected by the user as such: “where there
7 is the classification error . . . the user might be prompted to confirm that the a priori classification
8 is accurate.” *See id.* at 23 (citing '522 patent 19:34-46). As such, the presence of an error within
9 the social signature merely prompts an analysis of the accuracy of the social template, and is not at
10 odds with the subsequent confirmed presence or absence of a mistake or error in the social
11 template classification. Contrary to e.Digital’s assertion (Op. Br. at 21-23), Dropcam’s proposed
12 construction mirrors this explanation, by allowing the presence of an error within the social
13 signature to be distinct from the confirmed, or rejected, accuracy of the social template.
14 Therefore, Dropcam’s construction is consistent with the use of the term by the asserted patents
15 and further reflects the plain and ordinary meaning of the term “accurate.” *See Ex. D, Webster’s*
16 *New World College Dictionary*, at 10 (defining “accurate” as “free from mistakes or errors”).

17 In contrast, e.Digital’s construction —“capable of desired processing”—is circular and
18 unhelpful, offering no explanation as to what type of processing is desired or when something is
19 capable of such processing. Moreover, e.Digital’s construction is contrary to the shared
20 understanding of the claimed invention. At no point do the claims or the specification state that
21 the “determined social template,” whether “accurate” or “not accurate,” must prevent the social
22 template from being processed. *See, e.g.,* '618 patent at 26:30-34, cl. 15. To the contrary, the
23 specification explains that in certain circumstances “should a caller be given the wrong amounts of
24 information, the Mother could again activate the social training program 167 to improve the social
25 signatures recognized by the social template.” *Id.* at 17:36-40. This clarifies that even though the
26 selected social template was not “accurate” in that circumstance, it was nevertheless processed to
27 deliver the designated information. Accordingly, the Court should reject e.Digital’s opaque
28 construction and construe “accurate” to mean “free from mistakes or errors.”

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By: /s/ Stefani E. Shanberg
Stefani E. Shanberg

Attorney for Defendant
DROPCAM, INC.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the foregoing document has been served on this date to all current and/or opposing counsel of record, if any to date, who are deemed to have consented to electronic service via the Court's CM/ECF system. Any other counsel of record will be served by electronic mail, facsimile and/or overnight delivery.

I declare under penalty of perjury of the laws of the United States that the foregoing is true and correct. Executed this 24th day of June, 2015 at San Francisco, California.

By: /s/ Stefani E. Shanberg
Stefani E. Shanberg